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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _03 December 2008_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _54,55,57-60,65,66 and 70_ is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _54,55,57-60,65,66 and 70_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☐ All   b)☐ Some * c)☐ None of:

　　　　1.☐ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
　　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
　　Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____ .

DETAILED ACTION

Notice to Applicant

This communication is in response to the communication filed 12/03/2008.

Pending claim(s): 54-55, 57-60, 65-66, 70. Cancelled claim(s): 1-53, 56, 61-64, 67-69, 71-108. Amended claim(s): 54-55.

Response to Amendment

As per the objection to the amendment filed 07/11/2001 under 35 USC 132(a) impose in the previous Office Action, this objection is hereby maintained in view of Applicant's failure to adequately traverse this objection.

As per the objection to the specification under 35 USC 112, first paragraph imposed in the previous Office Action, this objection is hereby maintained in view of Applicant's failure to adequately traverse this objection.

As per the rejection of claims 54-67, 70, 73-76, 107-108 under 35 USC 112, first paragraph imposed in the previous Office Action, this rejection is hereby withdrawn in part in view of Applicant's cancellation of claims 56, 61-64, 67, 73-76, 107-108. The remainder of this rejection with respect to claims 54-55, 57-60, 65-66, 70 is hereby maintained in view of Applicant's failure to adequately traverse this rejection.

As per the rejection of claim 75 under 35 USC 112, second paragraph imposed in the previous Office Action, this rejection is hereby withdrawn in view of Applicant's cancellation of claim 75.

The amendment filed 12/03/2008 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The newly added limitation in claim 54 recites:

calculating, by the computer, a premium for the property based at least in part on the collected sensor data, wherein the effect of the collected sensor data on the calculation of the premium varies based on the indicated Standard Industrial Code [[use]].

These newly added limitations appear to constitute new matter. Applicant did not point out, nor was Examiner able to find, any support for these newly added limitations in the specification as originally filed.

Applicant is requested to clarify the issues discussed above, to specifically point out support for the newly added limitations in the originally filed specification and claims to the extent possible, and to cancel any new matter in the reply to this Office Action.

Specification

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 USC 112, first paragraph for at least the same rationale as discussed above, and incorporated herein.

Claim Rejections - 35 USC § 112

Claim(s) 54-55, 57-30, 65-66, 70 is/are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

As per claim(s) 54-55, 57-30, 65-66, 70, these claims are rejected for at least the same rationale as discussed above, and incorporated herein.

NOTE: The rejection presented hereinbelow if for Applicant's consideration should Applicant properly traverses the new matter issues discussed above in the response hereto.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim(s) 54-55, 57-60, 65-66, 70 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer (20020116228) in view of Rejda (Principles of Insurance, mailed 09/03/2008), Applicant Admitted Prior Art (AAPA), McMillan (5797134), and Butler (Driver Record: a Political Red Herring That Reveals the Basic Flaw in Automobile Insurance Pricing, mailed 04/02/2008).

It is noted that the official notice taken in a previous Office Action is taken to be AAPA because Applicant failed to adequately traverse Examiner's assertion, and because Applicant concedes to the previously noticed fact. See below.

As per claim 54, Bauer teaches a method (Title) capable of:

(a) being deployed on-line over the Internet (reads on "computerized") (Abstract);

(b) providing auto (reads on "a property") insurance (Figure 1);

the method comprising:

(a) receiving, by the on-line system, a request to insure a vehicle (Figure 3 label 56);

(b) receiving, by the on-line system, use and garaging information of the vehicle (reads on "the intended use of the property") (Figure 3 label 60), wherein the customer can use the system to specify if the car is a commuter car (page 4 paragraph 0101).

Bauer does not teach "a Standard Industrial Code ".

Rejda teaches calculating the premium based on:

(a) the territory where the vehicle is principally used and garaged (page 229 column 2 paragraph 3);

(b) the driving record (page 231 column 1 paragraph 1-3);

(c) the basis of how the car is driven, comprising pleasure with a one-way mileage to work under three miles, drive to work with a per diem mileage of three to fifteen miles or more, business use, and farm use that is not driven to work or school (page 230 column 1 paragraph 4 Use of the Automobile).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Rejda within the embodiment of Bauer with the motivation of accurately pricing insurance coverage based on vehicle usage for auto insurance.

The combined teachings of Bauer and Rejda suggest receiving the use of the vehicle from the customer, wherein the use may be personal, commute, business use, and farm use.

Bauer and Rejda do not teach "a Standard Industrial Code".

AAPA teaches that using standard industry codes (SIC) is old and well established in the art of insurance.

Additionally, on page 7 of the Remarks filed 12/03/2008 Applicant asserts:

Applicants concede that insurers have used SIC codes in classifying insured property.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of the AAPA within the embodiment of Bauer and Rejda with the motivation of accurately assessing the insurance risk, and providing a convenient and standardized technique to specify the insured's industry, especially for customers who use their vehicles for commute, business use, and farm use.

Bauer further teaches:

(c) the user changing certain insurance parameters and the system calculating the new premium for the user to review without human intervention responsive to the user input (Abstract, page 1 paragraph 0003-0004 and throughout), wherein the driving records of each driver listed on the policy are used to calculate the premium (page 2 paragraph 0031).

As such, the general state of the art for insurance sales uses automated underwriting to generate a premium for new or existing customers (Bauer; Figure 1).

The level of ordinary skill in the art, as evident by Bauer and Rejda, recognizes that the use of the vehicle affects the premium of the insurance coverage, as discussed above and incorporated herein.

The combined teachings of Bauer, Rejda, and AAPA suggest processing the disclosed use of the vehicle from the customer, as well as analyzing the driving history of the insured driver(s) to determine the premium.

Bauer, Rejda, and AAPA do not teach "collecting sensor data".

McMillan teaches that conventional methods for determining costs of motor vehicle insurance involve gathering relevant historical data of the applicant by referencing the applicant's public motor vehicle driving record (column 1 line 13-18). Examiner notes that this feature is explicitly taught in Bauer as a standard technique in the art to calculate the premium (Bauer; page 2 paragraph 0031).

McMillan further teaches using vehicle sensors to collect data concerning the operation of the vehicle to prospectively set the insurance rate (Abstract, column 5 line 36-45).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of McMillan within the embodiment of Bauer, Rejda, and AAPA with the motivation of rating the driver based on verifiable data (Bauer; column 2 line 40-55).

Bauer further teaches:

(d) calculating the premium (reads on "underwriting"), with the computer system without human intervention, for providing insurance coverage for the vehicle based on the use information and the driving record of drivers listed on the policy (reads on "use-specific underwriting guidelines") (Figure 3 label 88).

Insofar as "applying Standard Industrial Code-specific underwriting guidelines that take into account the collected sensor data", the combined teachings of Bauer, Rejda, AAPA, and McMillan suggest rating the policy based on the particular use of the vehicle represented by a SIC (reads on "specific underwriting guidelines") and adjusting the premium based on sensor data (reads on "take into account"), as discussed above and incorporated herein.

Bauer further teaches:

(e) displaying the premium for the coverage (reads on "offering insurance coverage for the property based on the underwriting") (Figure 3 label 88).

Insofar as "denying insurance coverage", the applied art need not teach this limitation in view of "one of". MPEP 2111.04.

Assuming *arguendo* that this limitation flows inherently therefrom, Butler teaches using severely expensive surcharges to refuse non-desirable customers (page 231 paragraph 4).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of Butler within the embodiment of Bauer, Rejda, AAPA, and McMillan with the motivation of providing a convenient refusal price to decline coverage to non-desirable customers, and thereby increasing insurer profits (Butler; page 231 paragraph 4).

Bauer further teaches:

(f) calculating, via the on-line system, the premium for the vehicle based on the use and the driving records, as discussed above and incorporated herein.

Insofar as "a premium… based at least in part on the collected sensor data", the combined teachings of Bauer, Rejda, AAPA, McMillan, and Butler suggest using sensor data to calculate the premium, as discussed above and incorporated herein.

Bauer and Butler do not teach "the effect of the collected sensor data on the calculation of the premium varies based on the indicated Standard Industrial Code".

As discussed above, Rejda teaches calculating the premium based on:

(a) the territory where the vehicle is principally used and garaged (page 229 column 2 paragraph 3);

(b) the driving record (page 231 column 1 paragraph 1-3);

(c) the basis of how the car is driven, comprising pleasure with a one-way mileage to work under three miles, drive to work with a per diem mileage of three to fifteen miles or more, business use, and farm use that is not driven to work or school (page 230 column 1 paragraph 4 Use of the Automobile).

McMillan teaches using sensors to detect the number of miles driven (column 5 line 19) and the location of night and work parking (column 4 line 50-54).

Accordingly, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to:

(a) receive a disclosure from the customer regarding the type of use for the vehicle (Bauer; Figure 3 label 60, page 4 paragraph 0101, Rejda; page 230 column 1 paragraph 4 Use of the Automobile, McMillan; column 2 line 28);

(b) based on the customer's disclosure of the type of use, determining that the mileage that the driver should not exceed, and the area where the vehicle should not go

(Rejda; page 230 column 1 paragraph 4 Use of the Automobile) (for example, a vehicle

disclosed as a short-distance commuter should not exceed the three mile limit, a farm

vehicle should stay on the farm), wherein business purposes require a higher rating

(Rejda; page 230 column 1 paragraph 5);

> (c) using sensor data collected from sensors embedded on the vehicle,

monitoring the number of miles driven (McMillan; column 5 line 19) and where the

vehicle is parked at night and at work (McMillan; column 4 line 50-54).

> The motivation to combine the teachings of Rejda and McMillan within the

embodiment of Bauer, Rejda, AAPA, McMillan, and Butler would have been to verify the

actual usage of the vehicle to accurately price the premium (McMillan; column 2 line 40-

55).

> The skilled artisan would have realized the benefit of being able to analyze

vehicle usage in view of the disclosed use, to identify drivers who violate their disclosed

use (i.e. disclosed as pleasure but actually used for business, disclosed as short-

commute but actually used for long commute, disclosed as farm use but actually used

on public roads, etc.). This is explicitly taught by McMillan, who teaches that there

exists a need to more reliably and accurately accumulate data having a highly relevant

evidential value towards predicting the actual manner of a vehicle's future operation

(column 2 line 53-55).

> Accordingly, using sensor data to monitor the vehicle's actual usage, as taught

by McMillan, reliably and accurately provide data that can be used to calculate the

premium in lieu of the conventional technique of relying solely on driving records to

calculate the premium (McMillan; column 2 line 40-55).

As per the set of claim(s): 55, this set of claim is rejected for substantially the

same rationale as applied to the rejection of the set of claim(s): 54, respectively, and

incorporated herein.

As per claim 57, Bauer teaches a photo inspection of the vehicle (reads on

"sensor data… indicating the condition of the property") (Figure 3 label 84).

Notwithstanding the above, McMillan teaches using sensors to detect the number

of miles driven (column 5 line 19) and the location of night and work parking (column 4

line 50-54), as discussed above, and incorporated herein.

Therefore, the combination constructed in claim 55 suggests the claimed

invention.

As per claim 58, Bauer, Rejda, AAPA, and Butler do not teach "data indicating

usage of technology incorporated into the property".

McMillan teaches that it is known in the prior art to provide surcharges and

discounts based on vehicle equipments (reads on "technology incorporated into the

property") (column 2 line 31-36).

McMillan further teaches detecting data capable of indicating the status of

seatbelt use (column 4 line 42).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the teachings of McMillan within the embodiment of Bauer, Rejda, AAPA, McMillan, and Butler with the motivation of accurately pricing insurance premiums with the actual risk associated with a particular policy (McMillan; column 2 line 40 to column 3 line 60).

As per claims 59-60, Bauer, Rejda, AAPA, McMillan, and Butler do not teach "goods", "a building", "a boat", or "an airplane".

AAPA teaches that providing insurance for goods, buildings, marine vessels, and aircraft is old and well established in the art of insurance.

Furthermore, AAPA teaches that marine vessels and aircraft, species of an "automobile", are old and well established forms of transportation.

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to include the features of AAPA within the embodiment of Bauer, Rejda, AAPA, McMillan, and Butler. Using the known technique of providing sensor data on an insured property for accurately pricing insurance coverage of McMillan would have been obvious to one of ordinary skill in the art.

As per the set of claim(s): 65, 66, this set of claim is rejected for substantially the same rationale as applied to the rejection of the set of claim(s): 54, 54, respectively, and incorporated herein.

As per claim 70, Bauer teaches:

(a) using driving records to rate the policy (suggests "a first premium component" in view of the rationale applied to claim 54 above, and incorporated herein");

(b) using drivers, age, gender, driver type, and proof of financial responsibility status to rate the policy (reads on "data generic to the insured property", wherein a vehicle is known to be capable of being driven by any driver) (page 2 paragraph 0030).

Response to Arguments

Applicant's arguments filed 12/03/2008 have been fully considered but they are not persuasive.

On page 4 Applicant asserts:

Applicants wish to thank Examiner Nguyen for his time and consideration during the telephonic interview conducted with the Undersigned on November 18, 2008. The interview primarily focused on the § 112 rejections and the related objections to Applicants' July 11, 2008, amendment and the specification. After discussing the specification in the interview, Examiner Nguyen tentatively agreed to withdraw these rejections and related objections.

In this interview, Examiner stated that any applicable objections and rejections under 35 USC 112, first paragraph would be withdrawn on the condition that Applicant properly traverse the new matter issues addressed in the previous Office Action.

As per claim 54, on page 5 Applicant asserts:

The claim language in question requires that the premium determination be based at least in part on a function of collected sensor data. In addition, the results of the function used to evaluate the sensor data varies based on intended use. One illustrative indicator of use described throughout the application is a Standard Industrial Classification Code or SIC code. Amended claim 54 is amended to explicitly refer to an SIC code-based implementation.

Examiner agrees with Applicant's characterization of the claim. In particular, claim 54 recites:

the effect of the collected sensor data on the calculation of the premium varies based on the indicated Standard Industrial Code.

Accordingly, the claim requires that the Standard Industrial Code (SIC) affects **how** the collected sensor data is used to calculate the premium.

Examiner does not dispute that the specification as originally filed discloses using the SIC and the collected sensor data to calculate the premium; however, as originally disclosed in the specification, the SIC and the collected sensor data are both independent variables that affect the premium calculation, wherein the effects of the SIC and the collected sensor data on the premium are distinct and independent, i.e. the calculation does not vary the way the collected sensor data based on the SIC.

As presently claimed, the claim requires that the collected sensor data be first modified by the SIC before using the collected sensor data in the premium calculation.

On page 5 Applicant asserts:

One illustrative, non-limiting, example of a premium determination process that utilizes a SIC code-varying evaluation of sensor data is described in relation to Figure 4.

Figure 4 as originally filed discloses:

FIG. 4
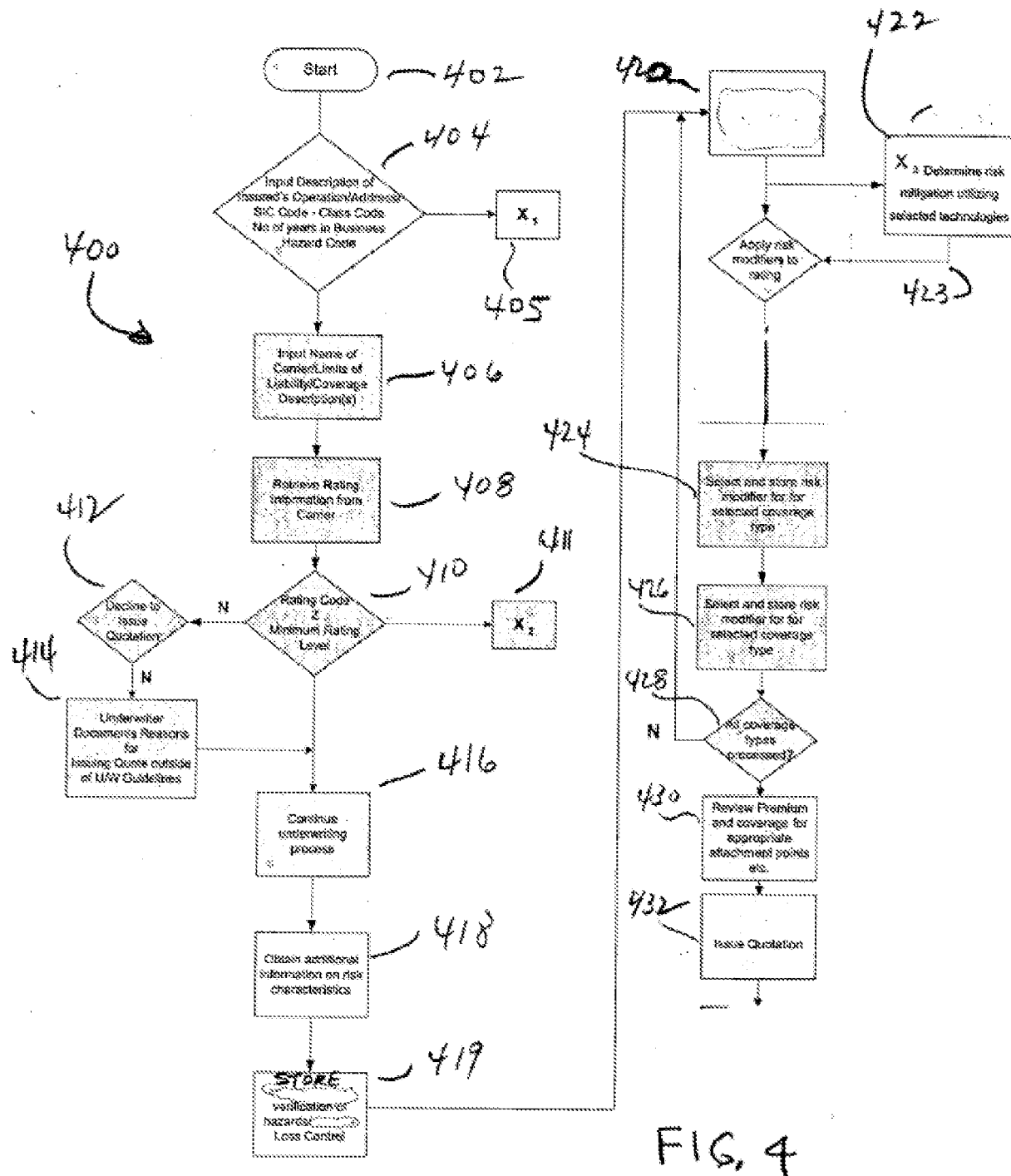
As such, Figure 4 as originally filed does not disclose modifying the collected sensor data with the SIC before using the collected sensor data to calculate the premium. In fact, Figure 4 does not explicitly disclose using collected sensor data at all. Applicant has not pointed out any implicit or explicit support for using collected sensor data to calculate the premium, or for using the SIC to modify the collected sensor data, and using the modified collected sensor data to calculate the premium.

Insofar as the SIC is supported, Figure 4 discloses inputting the SIC (label 404). Figure 4 does not explicitly disclose using the SIC to calculate the premium. Applicant has not pointed out any implicit or explicit support for using the SIC to calculate the premium, or for using the SIC to modify the collected sensor data, and using the modified collected sensor data to calculate the premium.

On page 5 Applicant further asserts:

Specifically, as set forth on page 30, lines 13-16, a premium is calculated based on at least four pieces of information, including: a minimum premium amount, a hazard rating code, and two risk modifier codes.

Page 30, line 13-16 discloses:

plurality of different insurance attachment points. For each attachment point, the

corresponding premium amount generated by the system 400 is based on, among other

15   things, a minimum premium amount associated with the SIC input in step 404, the hazard

rating code(s) selected in step 418, and the two risk modifier code(s) selected in step 422.

Examiner agrees with Applicant's assertion. Namely, this portion discloses, as

asserted by Applicant, that the premium is calculated based on at least:

(1) a minimum premium amount;

(2) a hazard rating code;

(3) a first risk modifier code;

(4) a second risk modifier code.

On page 5 Applicant further asserts:

> Determination of a hazard rating code is described further on page 29, lines 8-
14. Specifically, this passage describes calculating a hazard rating code based on loss or hazard
mitigation technology and hazard rating instructions ("instructions").

Page 29, line 8-14 discloses:

> The loss or hazard mitigation technology and hazard rating instructions contain factors
>
> that are considered when associating a risk to a particular SIC. Based on risk mitigation
>
> 10   technology and hazard rating information, the user selects one or more ratings for the
>
> quotation in step 418. The selected risk mitigation technology and hazard rating(s) are
>
> then stored in 419 in the system 200 databases, means 250, 270 as part of the computer
>
> file associated with the particular quotation.

Examiner disagrees with Applicant's assertion.

Specifically, Applicant asserts that this portion discloses calculating a hazard

rating code. Nowhere in this portion does the specification disclose a hazard rating

code.

Insofar as the hazard rating is supported, line 10 discloses "the user selects one or more ratings" and line 11 discloses "the selected hazard rating(s)".

This portion does not provide explicit support for selecting the hazard rating. At best, this portion provides implicit support for selecting a plurality of hazard ratings.

Nowhere in this portion does there exists support for selecting a hazard rating code, much less selecting a hazard rating code based on loss or hazard mitigation technology and hazard rating instructions.

It is unclear what Applicant intends to imply with "("instructions")" in the remarks. Additional clarification is requested.

On page 5 Applicant further asserts:

> As stated in the preceding paragraph of the application on page 29, lines 2-6, the system maintains a database that stores instructions that "correspond to each SIC that user might enter into the system." That is, the loss or hazard mitigation technology and hazard rating instructions are SIC code dependent.

Page 29, line 2-6 discloses:

> with the SIC that were previously entered in step 404. The present invention maintains a
>
> database on database means 250 and database means 270, which contains underwriting
>
> instructions and guidelines, including minimum premiums, loss or hazard mitigation
>
> 5   technology and hazard rating instructions, corresponding to each SIC that a user might
>
> enter into the system 400 in step 404.

Examiner agrees with Applicant assertion that page 29, line 2-6 support storing instructions that correspond to each SIC.

This sentence, when rewritten properly, discloses: "underwriting instructions and guidelines... corresponding to each SIC, wherein the underwriting instructions and guidelines comprise:

(1) minimum premiums;

(2) loss mitigation technology;

(3) hazard mitigation technology;

(4) hazard rating instructions".

As such, the underwriting instructions and guidelines are SIC-specific.

Additionally, Examiner agrees that the loss or hazard mitigation technology and hazard rating instructions are SIC-specific.

On page 5 Applicant further asserts:

The instructions dictate how the system takes into account risk mitigation technology and hazard rating information. See page 29, lines 9-11.

Page 29, line 9-11 discloses:

that are considered when associating a risk to a particular SIC. Based on risk mitigation

10   technology and hazard rating information, the user selects one or more ratings for the

quotation in step 418. The selected risk mitigation technology and hazard rating(s) are

Examiner disagrees with Applicant's assertion. Nowhere in this portion does there exist support for using instructions to account for risk mitigation technology and hazard rating information.

Insofar as support for this feature is concerned, this portion discloses the user selecting one or more ratings.

As discussed above, at best this section provides implicit support for selecting a plurality of risk mitigation technology and hazard ratings.

On page 5 Applicant further asserts:

> One specific type of risk mitigation technology and hazard information described in several locations in the specification, including, for example at p. 8, line 21-p. 9, line 2 and p. 27, lines 14-16, is sensor data.

Page 8, line 21 to page 9, line 2 discloses:

20

, 　　In the present invention, one or more electronic means located in a building, vehicle or on

goods having requisite interface devices, accumulates data from one or more

observational devices, measurement devices, detectors, or sensors (collectively

"sensors") related to physical points determinative of salient risk related information and

transmits the information to a central computer for analysis.

Page 27, line 14-16 discloses:

> The risk modification value of the code 240 may be
> 15   further modified by the actual use of the technology as assessed by the acquisition of
> sensor data 102(a) through 102(n).

Examiner disagrees with Applicant's assertion. Nowhere in these portions does there exist support for sensor data being a type of risk mitigation technology and hazard information.

Insofar as support is provided, page 8 line 21 to page 9 line 2 discloses using sensors to collect data, wherein the collected data represents salient risk related information.

Page 27 line 14-16 discloses modifying the risk modification value based on the collected sensor data.

On page 5 Applicant argues:

> By using instructions that take into account
> sensor data in an SIC-dependant fashion, the systems and methods disclosed in the application
> describe the claimed subject matter in question.

Examiner strongly disagrees. Based on the analysis above, nowhere in the specification as originally does there exist explicit, implicit, or inherent support for:

(a) receiving a SIC;

(b) collecting sensor data;

(c) modifying the collected sensor data with the SIC;

(d) using the modified collected sensor data to calculate the premium.

This paraphrasing amounts to the following limitation in claim 54:

the effect of the collected sensor data on the calculation of the premium varies based on the indicated Standard Industrial Code

For new or amended claims, it is not enough to specifically point out that the claimed features were originally disclosed.

MPEP 2163(I)(B) reads as follows:

"While there is no *in haec verba* requirement, **newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure**".

MPEP 2163.02 reads as follows:

"An applicant shows possession of the claimed invention by **describing the claimed invention with all of its limitations** using such descriptive means as words, structures, figures, diagrams, and formulas that fully set forth the claimed invention. *Lockwood v. American Airlines*, Inc., 107 F.3d 1565, 1572, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997)".

To clarify the record, Applicant is suggested to refer to the specification as originally file to provide support for the claimed embodiment in its entirety, including discussing how all the claimed features were originally described in a single embodiment via express, implicit, or inherent support.

Applicant is reminded that mere original disclosure of a claim feature is not enough to meet the written description requirement for amended claims. The

specification as originally filed must provide support for the claimed embodiment with no manipulation required thereof.

Any modification, obvious or otherwise, of the original disclosure required to arrive at the claimed invention would render the added features new matter.

To properly point out support for the claim in the specification as originally filed, Applicant is suggested to discuss how the specification as originally filed is anticipatory of the entire new or amended claim, including all claim features, in a single embodiment with no modification required of the specification.

Because Applicant later argues this feature as a distinguishing feature, it is imperative that Applicant provides explicit, implicit, or inherent support for this limitation in the specification as originally filed.

In this case, Applicant has failed to point out the feature of modifying the collected sensor data with the SIC before using the modified collected sensor data to calculate the premium.

Therefore, this feature is considered to be new matter not supportable by the specification as originally filed.

As per claim 54, on page 6 Applicant argues:

As an initial matter, the Action fails to provide sufficient rationale for one of ordinary skill in the art to combine the references. The alleged rationale is the desire to accurately price insurance coverage. Such a rationale would justify combining virtually any two references related to insurance technology. Allowing such a rationale to be sufficient for justifying the combination of references would completely vitiate this requirement for the entire field of art.

Examiner cannot ascertain the scope of Applicant's argument regarding

"completely vitiate". Additional clarification is requested.

This motivation comes explicitly from the references themselves.

Bauer teaches (page 4 paragraph 0098):

> The driving record for each
> driver listed on the policy can also be displayed.

Accordingly, it is known in the art to use driving records to accurately price the

premium.

This is made explicit by Rejda (page 230):

Certain credits and rate discounts are allowed with respect to the rating factor of age. A premium credit may be given if the youthful driver of a family car is attending a school or college more than 100 miles away from home. Also, female drivers ages thirty through sixty-four may be eligible for a rate discount if they are the only drivers in their households. Older drivers age sixty-five or over are also eligible for rate discounts in many companies.

Use of the Automobile

Use of the automobile is another important rating factor. Insurers classify automobiles on the basis of how the car is driven, such as the following.

1. Pleasure use—not used in business or customarily driven to work, unless the one-way mileage to work is under three miles.
2. Drive to work—not used in business but is driven three to fifteen miles to work each day.
3. Drive to work—not used in business, but is driven fifteen or more miles each way.
4. Business use—customarily used in business or professional pursuits.
5. Farm use—principally garaged on a farm or ranch, and not used in any other business or driven to school or other work.

A car classified for farm use has the lowest rating factor, followed next by pleasure use of the car. Driving the car to work or using it for business purposes requires a higher rating factor.

McMillan also teaches (column 1):

> Conventional methods for determining costs of motor
> vehicle insurance involve gathering relevant historical data
> from a personal interview with the applicant for the insur- 15
> ance and by referencing the applicant's public motor vehicle
> driving record that is maintained by a governmental agency,
> such as a Bureau of Motor Vehicles. Such data results in a
> classification of the applicant to a broad actuarial class for
> which insurance rates are assigned based upon the empirical 20
> experience of the insurer. Many factors are relevant to such
> classification in a particular actuarial class, such as age, sex,
> marital status, location of residence and driving record.

Butler also teaches (page 201):

> It is well known among insurance professionals that there are no
> "safe" drivers because even "at fault" accidents and traffic convictions
> are mostly random events—the luck of conditions existing when a mistake
> is made. Only a small minority of all drivers have accident involvements
> or convictions of any kind entered on their state driver records in a year.
> It is thus impossible for Driver Record or "merit" pricing to lower pre-
> miums significantly for the many lucky "safe" drivers by unjustifiably
> punishing the few unlucky "unsafe" drivers. The reckless driver is a
> serious public safety problem that higher premiums won't solve.
>
> The thesis of this paper is that it is professionally dishonest to use
> "identical driving records" to excuse charging the same premiums for
> insuring cars driven different mileages.

Accordingly, it is well known in the art to use driving records and the disclosed

use of vehicle to calculate premium.

The motivation to better predict risks and thereby calculating the premium more

accurately comes from the references themselves.

McMillan teaches (column 2):

40   A principal problem with such conventional insurance determination systems is that much of the data gathered from the applicant in the interview is not verifiable, and even existing public records contain only minimal information, much of which has little relevance towards an assessment of

45   the likelihood of a claim subsequently occurring. In other words, current rating systems are primarily based on past realized losses. None of the data obtained through conventional systems necessarily reliably predicts the manner or safety of future operation of the vehicle. Accordingly, the

50   limited amount of accumulated relevant data and its minimal evidential value towards computation of a fair cost of insurance has generated a long-felt need for an improved system for more reliably and accurately accumulating data having a highly relevant evidential value towards predicting

55   the actual manner of a vehicle's future operation.

According to McMillan, the driving record is incomplete and the disclosed use obtained from an interview with the user are not reliable because these data are not verifiable. Accordingly, the prior art is motivated to solve this problem by using more reliable and accurate techniques to predict a vehicle's future operation.

As such, the need to accurately predict the actual manner of a vehicle's future operation comes from McMillan (column 2 line 49-55).

In response to Applicant's assertion that this motivation, if valid, would render all references in insurance technology combinable, Examiner submits that this motivation is explicitly found in the prior art and was not manufactured by Examiner.

As such, this motivation drives innovation in the insurance industry, wherein insurers are constant striving for new and improved technique to accurately predict future vehicle usage.

On page 6 Applicant further argues:

Even if one of ordinary skill in the art were to combine the references, the combination would not yield the claimed subject matter. That is, the combination would not yield a system that calculates an insurance premium for a property based on sensor data, in which the impact of the sensor data on the premium calculation varies based on an SIC code indicated as being associated with the property.

Bauer further teaches:

(f) calculating, via the on-line system, the premium for the vehicle based on the use and the driving records, as discussed above and incorporated herein.

Insofar as "a premium… based at least in part on the collected sensor data", the combined teachings of Bauer, Rejda, AAPA, McMillan, and Butler suggest using sensor data to calculate the premium, as discussed above and incorporated herein.

Bauer and Butler do not teach "the effect of the collected sensor data on the calculation of the premium varies based on the indicated Standard Industrial Code".

As discussed above, Rejda teaches calculating the premium based on:

(a) the territory where the vehicle is principally used and garaged (page 229 column 2 paragraph 3);

(b) the driving record (page 231 column 1 paragraph 1-3);

(c) the basis of how the car is driven, comprising pleasure with a one-way mileage to work under three miles, drive to work with a per diem mileage of three to fifteen miles or more, business use, and farm use that is not driven to work or school (page 230 column 1 paragraph 4 Use of the Automobile).

McMillan teaches using sensors to detect the number of miles driven (column 5 line 19) and the location of night and work parking (column 4 line 50-54).

Accordingly, at the time the invention was made, it would have been obvious to one of ordinary skill in the art to:

(a) receive a disclosure from the customer regarding the type of use for the vehicle (Bauer; Figure 3 label 60, page 4 paragraph 0101, Rejda; page 230 column 1 paragraph 4 Use of the Automobile, McMillan; column 2 line 28);

(b) based on the customer's disclosure of the type of use, determining that the mileage that the driver should not exceed, and the area where the vehicle should not go (Rejda; page 230 column 1 paragraph 4 Use of the Automobile) (for example, a vehicle disclosed as a short-distance commuter should not exceed the three mile limit, a farm vehicle should stay on the farm), wherein business purposes require a higher rating (Rejda; page 230 column 1 paragraph 5);

(c) using sensor data collected from sensors embedded on the vehicle, monitoring the number of miles driven (McMillan; column 5 line 19) and where the vehicle is parked at night and at work (McMillan; column 4 line 50-54).

The motivation to combine the teachings of Rejda and McMillan within the embodiment of Bauer, Rejda, AAPA, McMillan, and Butler would have been to verify the actual usage of the vehicle to accurately price the premium (McMillan; column 2 line 40-55).

The skilled artisan would have realized the benefit of being able to analyze vehicle usage in view of the disclosed use, to identify drivers who violate their disclosed

use (i.e. disclosed as pleasure but actually used for business, disclosed as short-

commute but actually used for long commute, disclosed as farm use but actually used

on public roads, etc.). This is explicitly taught by McMillan, who teaches that there

exists a need to more reliably and accurately accumulate data having a highly relevant

evidential value towards predicting the actual manner of a vehicle's future operation

(column 2 line 53-55).

Accordingly, using sensor data to monitor the vehicle's actual usage, as taught by

McMillan, reliably and accurately provide data that can be used to calculate the

premium in lieu of the conventional technique of relying solely on driving records to

calculate the premium (McMillan; column 2 line 40-55).

The remainder of Applicant's arguments on page 6-7 merely rehashes

arguments previously addressed above, and incorporated herein.

On page 7 Applicant further argues:

The suggestion in the Action that one would alter the sensor data based-premium component
is based purely on impermissible hindsight.

In response to applicant's argument that the examiner's conclusion of

obviousness is based upon improper hindsight reasoning, it must be recognized that

any judgment on obviousness is in a sense necessarily a reconstruction based upon

hindsight reasoning. But so long as it takes into account only knowledge which was

within the level of ordinary skill at the time the claimed invention was made, and does

not include knowledge gleaned only from the applicant's disclosure, such a

reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971).

In this case, only knowledge available from the level of ordinary skill available at

the time the invention was made was used to reconstruct the claimed invention.

Therefore, Examiner submits that no impermissible hindsight was applied.

If Applicant disagrees, Applicant is suggested to point out the portion of the

rejection wherein Examiner relied on Applicant's disclosure.

On page 7 Applicant further argues:

Claims 59-60 further distinguish over the cited references. Claims 59 and 60 recite that the
insured property are goods and a building, respectively. The Action asserts that this subject matter
is obvious because those in the art know to insure goods and buildings. This assertion, however, is
insufficient to render these claims obvious. As pointed out in prior responses, just because goods
and buildings have been insured in the past, it would not be obvious to use sensor data obtained
from monitoring those buildings or goods to adjust premium determination. Thus, Applicants
submit the Action fails to set forth a *prima facie* case of obviousness against these claims.

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount

to a general allegation that the claims define a patentable invention without specifically

pointing out how the language of the claims patentably distinguishes them from the

references.

In particular, Applicant makes no additional arguments other than to say "just

because goods and buildings have been insured in the past, it would not be obvious to

use sensor data obtained from monitoring those buildings or goods to adjust premium determination".

In this case, Examiner has applied rationale (C) from *KSR International Co. v. Teleflex Inc.*, 550 U.S. ___, ___, 82 USPQ2d 1385, 1395-97 (2007).

MPEP 2143(C) reads as follows:

To reject a claim based on this rationale, Office personnel must resolve the Graham factual inquiries. Then, Office personnel must articulate the following:

(1)   a finding that the prior art contained a "base" device (method, or product) upon which the claimed invention can be seen as an "improvement;"

(2)   a finding that the prior art contained a "comparable" device (method, or product that is not the same as the base device) that has been improved in the same way as the claimed invention;

(3)   a finding that one of ordinary skill in the art could have applied the known "improvement" technique in the same way to the "base" device (method, or product) and the results would have been predictable to one of ordinary skill in the art; and

(4)   whatever additional findings based on the Graham factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

The rationale to support a conclusion that the claim would have been obvious is that a method of enhancing a particular class of devices (methods, or products) has been made part of the ordinary capabilities of one skilled in the art based upon the teaching of such improvement in other situations. One of ordinary skill in the art would

have been capable of applying this known method of enhancement to a "base" device

(method, or product) in the prior art and the results would have been predictable to one

of ordinary skill in the art. The Supreme Court in *KSR* noted that if the actual application

of the technique would have been beyond the skill of one of ordinary skill in the art, then

using the technique would not have been obvious. *KSR*, 550 U.S. at ___, 82 USPQ2d

at 1396. If any of these findings cannot be made, then this rationale cannot be used to

support a conclusion that the claim would have been obvious to one of ordinary skill in

the art.

In this case:

(1) the base device is goods and buildings previously noticed and inadequately

traversed by Applicant;

(2) the "comparable" device is the automobile, as discussed in Bauer, McMillan,

Rejda, and Butler, and has been improved by the use of sensors as claimed;

(3) one of ordinary skill in the art could have applied sensors to goods and

buildings in same way as automobiles to monitor the usage of goods and buildings with

certain predictability;

(4) the level of ordinary skill in the art recognizes that it is desired to accurately

obtain usage data of the insured item so that the policy may be accurately rated.

Therefore, applying sensors previously applied to automobiles to goods and buildings is

well within the level of ordinary skill in the art.

On page 8 Applicant asserts:

With respect to the matter of definition of the term "sensor", without conceding to the appropriateness of the definitions suggested in the Action, even under the broader standard for construction Examiners are obligated to apply during examination, Applicants believe this issue is moot based on the foregoing arguments, so long as the applied definition of sensor excludes humans, which Applicants understand the Examiner's proposed definitions to do.

The specification discloses (page 6):

In the future a wide variety of products will employ diagnostic tools, measurement devices, detectors and sensors (collectively, "sensors") to ascertain the potential for risk and consequent loss.

The specification further discloses (page 8-9):

one or more observational devices, measurement devices, detectors, or sensors (collectively "sensors") related to physical points determinative of salient risk related information

Page 15-18 of the previous Office Action reads as follows:

On page 10-11, Applicant argues that the applied art do not teach a "sensor".

In construing claim terms, the general meanings gleaned from reference sources, such as dictionaries, must always be compared against the use of the terms in context, and the intrinsic record must always be consulted to identify which of the different possible dictionary meanings is most consistent with the use of the words by the inventor. *Ferguson Beauregard /Logic Controls v. Mega Systems*, 350 F.3d 1327, 1338, 69 USPQ2d 1001, 1009 (Fed. Cir. 2003)

To the extent that Applicant's specification provides a controlling definition, it is not clear if Applicant intends for "diagnostic tools, measurement devices, detectors, and sensors" to be a controlling definition for "sensor", or if these are exemplary embodiments of a "sensor". Examiner considers this to be, at best, noncommittal definitions of a "sensor".

To the extent that Applicant relies on the American Heritage Dictionary of the English Language, Fourth Edition, which defines "sensor" as "a device, such as a photoelectric cell, that receives and responds to a signal or stimulus", a photoelectric cell is an exemplary embodiment of a "sensor", and therefore does not control the definition of "sensor".

To the extent that Applicant relies on Merriam-Webster Online Dictionary, 10th Edition, which defines "sensor" as "a device that responds to a physical stimulus (as heat, light, sound, pressure, magnetism, or a particular motion) and transmits a resulting impulse (as for measurement or operating a control)", heat, light, sound, pressure, magnetism, and a particular motion are exemplary embodiments of a stimulus, and therefore does not control the definition of "sensor". Further, for measurement and operating a control are intended uses of

the resulting impulse, and therefore also does not control the definition of "sensor".

Examiner notes that the two definitions provided by Applicant conflict because the first definition defines "a signal or stimulus", whereas the second definition defines "a physical stimulus". See above.

Examiner submits that "a signal or stimulus" is broader than "a physical stimulus.

Examiner submits that even in providing dictionary definitions, Applicant does not provide a single, unified, consistent definition of "sensor". Additional clarification is requested.

Based on the conflicting dictionary definitions provided by Applicant, and based on a best-effort interpretation thereof Examiner considers a "sensor" to be "a device that receives and responds to any stimulus".

Further, Merriam-Webster Online Dictionary defines "device" as "something devised or contrived; a scheme to deceive; something fanciful, elaborate, or intricate in design; a piece of equipment or a mechanism designed to serve a special purpose or perform a special function".

Claim 54 recites "sensor data related to the property". No additional recitation is directed towards the type of property.

Examiner submits that property is typically known as being tangible, e.g. cars, buildings, etc., and also as being intangible, e.g. patent, trademark, copyright. Therefore, within the context of the claim, it is apparently clear that a physical "sensor" cannot provide data for an intangible property.

If Applicant disagrees with this assertion, Applicant is requested to provide

clarification on how a physical device is capable of providing data related to an

intangible property.

Examiner further notes that the specification provides no controlling

definition for "property".

Therefore, based on the specification's failure to provide a controlling

definition, Applicant's failure to provide a consistent definition in the arguments,

the definition of "device" provided by the same dictionary used by Applicant, and

the context of the claim, Examiner broadly interprets "sensor" to recite any

structure capable of providing data on the insured property.

Even assuming *arguendo* that "sensor" can be reasonably interpreted to

exclude human beings, McMillan teaches using sensors to monitor a vehicle, as

discussed above and incorporated herein.

Accordingly, Applicant provides no controlling definition for "sensor". Instead,

Applicant merely asserts that "the definition of sensor excludes humans" with no

evidentiary support therefor.

In the interest of compact prosecution for Applicant, for purposes of applying

prior art, Examiner has interpreted "sensor" to recite non-human structure capable of

providing data descriptive of a piece of property, as asserted by Applicant.

Conclusion

The new ground(s) of rejection presented in this Office action, if any, was/were

necessitated by Applicant's amendment. Accordingly, **THIS ACTION IS MADE FINAL.**

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tran (Ken) N. Nguyen whose telephone number is 571-

270-1310. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:00

pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, C. Luke Gilligan can be reached on 571-272-6770. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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/T. N./
Examiner, Art Unit 3626
02/16/2008

/C. LUKE GILLIGAN/
Supervisory Patent Examiner, Art Unit